UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

LEDCOMM LLC, Plaintiff, v. SIGNIFY NORTH AMERICA CORP., SIGNIFY HOLDING B.V., and SIGNIFY N.V. Defendants.	Civil Action No. 6:20-cv-01056-ADA **JURY TRIAL DEMANDED**

JOINT CLAIM CONSTRUCTION STATEMENT

Pursuant to the Court's Scheduling Order (ECF No. 29) and Standing Order Governing Proceedings – Patent Cases, Plaintiff LedComm LLC and Defendants Signify North America Corp., Signify Holding B.V., and Signify N.V. hereby jointly file the attached Joint Claim Construction Chart identifying the terms for construction in this case and the parties' constructions. All terms were proposed for construction by Defendants.[1]

[1] While LedComm initially proposed the term "inserted into" in claim 1 of U.S. Patent No. 7,301,176 for construction, it no longer contends that construction of this term is necessary.

Dated: October 29, 2021

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of this document was served on all counsel of record in this case by filing the same via the Court's CM/ECF System on October 29, 2021, which will send a notice of filing of same to all parties.

/s/ Brady Cox
Brady Cox

JOINT CLAIM CONSTRUCTION CHART

I. U.S. Pat. No. 6,803,606

Disputed Claim	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
1. A light emitting device comprising: a substrate; a light emitting element on the substrate; a **reflector** on the substrate for reflecting a light beam outgoing from the light emitting element; and a resin disposed between the light emitting element and the **reflector** on the substrate, wherein **a face of the reflector on that reflects** a light beam outgoing from the light emitting element is **formed into a rough surface**.	***reflector*** No construction necessary; plain and ordinary meaning.	***reflector*** "a structure forming a side wall for reflecting the light beam outgoing from the light emitting element"	
	a face of the reflector on that reflects AGREED	***a face of the reflector on that reflects*** AGREED	a face of the reflector that reflects

Disputed Claim	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
	formed into a rough surface No construction necessary; plain and ordinary meaning.	***formed into a rough surface*** Indefinite. If not indefinite, "formed into a surface having an arithmetic mean roughness over 1 micron." Claim 1 is a product-by-process claim that requires forming the claimed structure into a rough surface.	
2. The light emitting device as defined in claim 1, wherein **the rough surface** of the **reflector** has an arithmetic mean roughness ranging of 1 μm or more and 20 μm or less.	***the rough surface*** No construction necessary; plain and ordinary meaning.	***the rough surface*** Indefinite. If not indefinite, "the surface having an arithmetic mean roughness over 1 micron."	
	reflector No construction necessary; plain and ordinary meaning.	***reflector*** "a structure forming a side wall for reflecting the light beam outgoing from the light emitting element"	

Disputed Claim	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
5. The light emitting device as defined in claim 1, wherein the **reflector** is made of a liquid crystal polymer.	***reflector*** No construction necessary; plain and ordinary meaning.	***reflector*** "a structure forming a side wall for reflecting the light beam outgoing from the light emitting element"	

II. U.S. Pat. No. 6,982,522

Disputed Claim	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
1. A LED device, comprising: a base having a recess with the upper surface opened, the inner wall surface of the recess constituting a reflection surface; a LED chip disposed on the inner bottom of the recess; a resin filled in the recess, the resin including phosphors which absorb a part of light emitted from the LED chip to convert the wavelength thereof and emit light; and	***a phosphor layer formed on the reflection surface / the phosphor layer*** No construction necessary; plain and ordinary meaning.	***a phosphor layer formed on the reflection surface / the phosphor layer*** "A continuous thickness of phosphor formed on the inner wall of the recess. This phosphor layer is separate and distinct from the claimed phosphors included in the resin." This is a product-by-process claim.	
a phosphor layer formed on the reflection surface, **the phosphor layer including the phosphors**, wherein **the phosphor layer comprises a plurality of phosphor layers** each of which is excited to emit a different wavelength of	***the phosphor layer including the phosphors*** No construction necessary; plain and ordinary meaning.	***the phosphor layer including the phosphors*** See above construction with respect to "a phosphor layer formed on the reflection surface" and "phosphor layer." Indefinite.	

Disputed Claim	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
light from each other.	***the phosphor layer comprises a plurality of phosphor layers*** No construction necessary; plain and ordinary meaning.	***the phosphor layer comprises a plurality of phosphor layers*** *See above construction with respect to "phosphor layer."* "the phosphor layer comprises a plurality of continuous thicknesses of phosphor formed on top of one another with respect to the inner wall"	
3. A LED device as claimed in claim 1, wherein **the plurality of phosphor layers** are so arranged that **the phosphor layer closer to the outside** emits the shorter wavelength of light.	***the plurality of phosphor layers*** No construction necessary; plain and ordinary meaning.	***the plurality of phosphor layers*** *See above construction with respect to "phosphor layer."* "the plurality of continuous thicknesses of phosphor formed on top of one another with respect to the inner wall"	
	the phosphor layer closer to the outside No construction necessary; plain and ordinary meaning.	***the phosphor layer closer to the outside*** *See above construction with respect to "phosphor layer."* "the phosphor layer closest to the reflection surface"	

Disputed Claim	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
4. A LED device as claimed in claim 1, wherein **the phosphor layer** is formed by a method selected from the group consisting of vacuum depositing, printing and ink-jet applying.	***the phosphor layer*** No construction necessary; plain and ordinary meaning.	***the phosphor layer*** "A continuous thickness of phosphor formed on the inner wall of the recess. This phosphor layer is separate and distinct from the claimed phosphors included in the resin." This is a product-by-process claim.	
5. A LED device as claimed in claim 1, wherein **the phosphors** are enclosed by micro-capsules each comprising Si as a main component.	***the phosphors*** No construction necessary; plain and ordinary meaning.	***the phosphors*** Indefinite.	

III. U.S. Pat. No. 7,012,277

Disputed Claim	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
1. A semiconductor light emitting device comprising: an LED chip, a first lead frame on which said LED chip is mounted, a second lead frame electrically connected to said LED chip via a wire, and a resin portion surrounding a circumference of said LED chip, and fastening said first and second lead frames, wherein **a metal body** is located under a region of said first lead frame where said LED chip is mounted, and wherein the second lead frame has a portion where the wire is connected and the metal body is provided to extend to a region below said portion of the second lead frame.	***a metal body*** No construction necessary; plain and ordinary meaning.	***a metal body*** "a mass of a material with high heat radiation"	

Disputed Claim	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
2. The semiconductor light emitting device according to claim 1, wherein **said metal body is spaced apart from said first and second lead frames**.	***said metal body is spaced apart from said first and second lead frames*** No construction necessary; plain and ordinary meaning.	***said metal body is spaced apart from said first and second lead frames*** "said metal body is separated by a gap between the entire metal body and said first and second lead frames such that there is no contact between the metal body and either lead frame"	
3. The semiconductor light emitting device according to claim 1, wherein said **metal body forms thermal and electrical contact** with said first lead frame.	***metal body*** No construction necessary; plain and ordinary meaning.	***metal body*** "a mass of a material with high heat radiation"	
	forms thermal and electrical contact No construction necessary; plain and ordinary meaning.	***forms thermal and electrical contact*** "touches to form direct thermal and electrical contact"	

Disputed Claim	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
6. The semiconductor light emitting device according to claim 1, wherein said **metal body** includes at least one type of material selected from the group consisting of copper, aluminum, copper alloy, and aluminum alloy.	***metal body*** No construction necessary; plain and ordinary meaning.	***metal body*** "a mass of a material with high heat radiation"	

IV. U.S. Pat. No. 7,154,125

Disputed Claim	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
1. A nitride-based semiconductor light-emitting device comprising: a reflective layer formed on a support substrate; a p-type nitride-based semiconductor layer, a light-emitting layer and an n-type nitride-based semiconductor layer successively formed on the reflective layer; wherein a light extracting surface located above said n-type nitride-based semiconductor layer has **irregularities**; and a **high refractive index** film including one selected from a group consisting of silicon nitride, indium oxide, neodymium oxide, zirconium oxide, titanium oxide, cerium oxide and bismuth oxide is formed on said n-type nitride-based semiconductor layer, and an upper surface of said **high refractive index** film is said light extracting surface.	***irregularities*** No construction necessary; plain and ordinary meaning.	***irregularities*** Indefinite. If not indefinite, "uneven variations in structure in the shape of the upper surface of the light extracting surface, the dimension of which are larger than the wavelength of the emitted light divided by the refractive index in the nitride-based semiconductor layer"	
	high refractive index No construction necessary; plain and ordinary meaning.	***high refractive index*** Indefinite.	

V. U.S. Pat. No. 7,161,190

Disputed Claim	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
1. A semiconductor light-emitting device, comprising: a light-emitting element; a first lead frame having a main surface having said light-emitting element mounted thereon; a resin portion for fixing said first lead frame, said resin portion has a reflecting portion reflecting light emitted from said light-emitting element; and a **heat-radiating member** bonded to a back face of said first lead frame with an electrically-conductive layer containing metal interposed therebetween, said electrically-conductive layer is formed to extend from an area below the reflecting portion to the area outside the area covered by the reflecting portion.	***heat-radiating member*** No construction necessary; plain and ordinary meaning.	***heat-radiating member*** "a structure formed of metal or ceramic material for improving efficiency in heat dissipation"	

Disputed Claim	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
5. The semiconductor light-emitting device according to claim 1, wherein said **heat-radiating member** contains at least one material selected from the group consisting of copper, aluminum, a copper alloy, and an aluminum alloy.	***heat-radiating member*** No construction necessary; plain and ordinary meaning.	***heat-radiating member*** "a structure formed of metal or ceramic material for improving efficiency in heat dissipation"	
6. The semiconductor light-emitting device according to claim 1, wherein said **heat-radiating member** is formed of a ceramic material.	***heat-radiating member*** No construction necessary; plain and ordinary meaning.	***heat-radiating member*** "a structure formed of metal or ceramic material for improving efficiency in heat dissipation"	

Disputed Claim	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
7. The semiconductor light-emitting device according to claim 6, further comprising a second lead frame spaced apart from said first lead frame and electrically connected to said light-emitting element via a wire, wherein said **heat-radiating member** is bonded to the back face of said first lead frame and a back face of said second lead frame with said electrically-conductive layer interposed therebetween, and said electrically-conductive layer is split in order to make said first lead frame and said second lead frame electrically non-conductive via said electrically-conductive layer in a gap between said first and second lead frames.	***heat-radiating member*** No construction necessary; plain and ordinary meaning.	***heat-radiating member*** "a structure formed of metal or ceramic material for improving efficiency in heat dissipation"	

VI. U.S. Pat. No. 7,301,176

Disputed Claim	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
1. A semiconductor light emitting device comprising: a semiconductor light emitting element, a first lead frame on which said semiconductor light emitting element is mounted, a second lead frame electrically connected to said semiconductor light emitting element via a wire, and light transmitting resin formed on said semiconductor light emitting element and on said first and second lead frames, wherein said light emitting element is surrounded by a light shielding resin, wherein **leading ends of said first and second lead frames are inserted into said light transmitting resin** to provide a holding portion holding said first and second lead frames, wherein said light shielding	***leading ends of said first and second lead frames are inserted into said light transmitting resin*** No construction necessary; plain and ordinary meaning.	***leading ends of said first and second lead frames are inserted into said light transmitting resin*** "leading ends of said first and second lead frames are placed inside the body of the light transmitting resin"	

Disputed Claim	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
resin has a reflectance higher than a reflectance of said light transmitting resin, and wherein said light shielding resin is formed to cover a bottom surface and a side surface of said holding portion provided in said light transmitting resin.			
5. The semiconductor light emitting device according to claim 1, wherein **a backside portion** of said first lead frame **corresponding to a region where said semiconductor light emitting element is mounted** is exposed outside of said light transmitting resin.	***backside portion . . . corresponding to a region where said semiconductor light emitting element is mounted*** No construction necessary; plain and ordinary meaning.	***backside portion . . . corresponding to a region where said semiconductor light emitting element is mounted*** "the surface of the lead frame opposite to the surface of the lead frame where the semiconductor light emitting element is mounted"	

VII. U.S. Pat. No. 7,490,959

Disputed Claim	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Construction
1. A light emitting apparatus, comprising: a placement surface that includes an electrode; a light emitter that is placed on the placement surface; and a transparent sealing resin that seals the light emitter, and forms a **concave surface** that is a light-outgoing surface via which light outgoes, the **concave surface** facing a surface of the light emitter, from which surface light is emitted, and the light emitter and the electrode being connected via a wire that is curved in such a way that **a top section of the curved wire substantially coincides with a deepest section of the concave surface**.	***concave surface*** No construction necessary; plain and ordinary meaning.	***concave surface*** "a surface that is more than naturally or slightly concave"	
	a top section of the curved wire substantially coincides with a deepest section of the concave surface No construction necessary; plain and ordinary meaning.	***a top section of the curved wire substantially coincides with a deepest section of the concave surface*** Indefinite. If not indefinite, "a top section of the curved wire touches or intersects a deepest section of the concave surface"	